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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,221	09/24/2004	Masayoshi Hiramoto	37065	5112

116 7590 07/26/2005

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EXAMINER

LE, HUYEN D

ART UNIT	PAPER NUMBER
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2646

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/509,221

Applicant(s)

HIRAMOTO ET AL.

Examiner

HUYEN D. LE

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 5,6 and 15 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4,7-14 and 16-21 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/11/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 5, 6 and 15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5, 6 and 15 have not been further treated on the merits.

Allowable Subject Matter

2. Claims 1-4, 7-14 and 16-21 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

None of prior art teaches a condenser sensor that comprises an electrically conductive case having an opening portion and an opposing portion, a fixed electrode, an electrically conductive diaphragm, an electrically conductive diaphragm supporting member, a circuit packaging board and a deformation protecting member, as specifically constructed in claim 1, wherein the deformation protecting member is for protecting the opposing portion from being deformed, the protecting member intervenes between the electrically conductive case and the diaphragm, and is disposed inwardly of a circumference of an oscillatable portion of the diaphragm and wherein the total area of the acoustic aperture in the fixed electrode is larger than one thousandth of a total area of the oscillatable portion of the diaphragm but smaller than one tenth of the total area of the oscillatable portion of the diaphragm.

None of prior art teaches a condenser sensor that comprises an electrically conductive case having an opening portion and an opposing portion, a fixed electrode, an electrically conductive diaphragm, an electrically conductive diaphragm supporting member, a circuit packaging board, a deformation protecting member, and an electrically conductive cloth, as specifically constructed in claim 2, wherein the deformation protecting member is for protecting the opposing portion from being deformed, the protecting member intervenes between the electrically conductive case and the diaphragm, and is disposed inwardly of a circumference of an oscillatable portion of the diaphragm and wherein the electrically conductive cloth is attached to and electrically connected with the electrically conductive case.

Conclusion

4. This application is in condition for allowance except for the following formal matters: the improper multiple dependent claims as mentioned above in paragraph 1.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Isogami et al. (U.S. patent 5,272,758) teaches a construction of an electret condenser microphone.

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Himori (U.S. patent 6,512,833) teaches an electret condenser microphone comprising a covering member that is made of a cloth.

Pavlovic (US 2002/0172389) teaches a construction of an electrostatic microphone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HL
July 22, 2005



HUYEN LE
PRIMARY EXAMINER